



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,721	05/20/2004	Mark A. Hochwalt	713629.421	8654

27128 7590 03/28/2006

BLACKWELL SANDERS PEPPER MARTIN LLP  
720 OLIVE STREET  
SUITE 2400  
ST. LOUIS, MO 63101

EXAMINER
----------

CHOI, FRANK I

ART UNIT	PAPER NUMBER
----------	--------------

1616

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/849,721	<b>Applicant(s)</b> HOCHWALT ET AL.	
	<b>Examiner</b> Frank I. Choi	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 50-107 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 50-107 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/2006 has been entered.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus et al. (US Pat. 4,826,497) in view of EP 0 509 409, Peterson et al. (US Pat. 5,780,020) and DE 19837539.

Marcus et al. teach fibrous absorbent articles containing a zeolite having at least about 90 percent framework of tetrahedral oxides units being SiO<sub>2</sub> tetrahedra, a sorptive capacity for water of less than 10 weigh percent when measure at 25 degrees Celsius and 4.6 torr, and a pore diameter of at least 5.5 Angstroms, where the water of hydration is removed (Column 3, lines 40-68, Column 4, lines 1-35). It is taught that other components such as medicants, other absorbents and adsorbents, such as sodium bicarbonate and clinoptilolite (Column 7, lines 23-29). It is taught that clinoptilolite is a preferred odor suppressant (Column 3, lines 32-35). It is disclosed that high zeolites, such as Abscents®, are preferred over the intermediate zeolites for

Art Unit: 1616

control of odors associated with sulfur compounds (Column 17, lines 60-68, Column 18, lines 1-5).

EP 0 509 409 teaches feminine products having a combination of acidic, basic and neutral deodorants and that that acidic particles having a pH of less than 7 are suitable as deodorants of basic compounds, that sodium bicarbonate is suitable as a deodorant of acidic compounds and that Abscents® and Smellrite ® are preferred pH neutral odor absorbing materials as they retain most of their absorbent capacity in moist conditions (pgs. 4,5).

Peterson et al. teach that antimicrobial agents, such as zinc oxide, are used in deodorant products to help to control odor by controlling bacteria or fungi (Column 4, lines 50-68, Column 5, lines 1-23). Peterson et al. discloses that the zeolites of the claimed invention are suitable for use in invention of Peterson et al. (See Peterson et al., Column 4, lines 58-61).

DE 19837539 teaches that maleic or fumaric acids are effective deodorants (Column 3, lines 10-56).

The difference between the prior art and the claimed invention is that the prior art does not expressly disclose the combination of the claimed acids, the claimed synthetic zeolite and metal or metal oxides. However, the prior art amply suggests the same as it is known the deodorant products contain the claimed acids, the claimed synthetic zeolites and the claimed metal or metal oxides for odor control. As such, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation that the addition of the acids, sodium bicarbonate, clinoptilolite and metal oxides would improve odor control.

One of ordinary skill in the art would be motivated to add zinc oxide as zinc oxide is disclosed to control odors by acting as an antimicrobial agent, would be motivated to add an acid having a pH of less than 7 as said acids are disclosed to control odors from basic compounds and would be motivated to use Smellrite® or Abscent® as the same are disclosed to retain most of their absorbent capacity in moist conditions with the expectation that the combination would be more effective as the combination would work against odors resulting from various sources.

The claimed acids are clearly encompassed by the disclosure of EP 0 509 409. EP 0 509 409 specifically discloses the following acids, maleic acid, stearic acid and malonic acid. Maleic acid appears to be structurally similar to aspartic acid (adds amino group substituent to carbon chain, removes double bond) and fumaric acid (trans isomer). Malonic acid appears structurally similar to fumaric acid (increases carbon chain by 1 carbon, adds double bond). As indicated above, the acids disclosed in EP 509 409 are disclosed to be effective in controlling odors. Further, as indicated above, the specifically disclosed acids in EP 509 409 appear to be structurally similar to the claimed acids and the prior art teaches that maleic and fumaric acid are effective deodorants. “An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties.” In re Payne, 203 USPQ 245, 254 (CCPA 1979). See also In re Dillon, 16 USPQ2d 1897 (Fed. Cir. 1991). As such, one of ordinary skill in the art would expect that homologues of maleic acid, stearic acid and malonic acid, including aspartic and fumaric, would have similar deodorant activity.

“It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the

Art Unit: 1616

very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art.” In *re* Kerkhoven, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.). See also In *re* Crockett, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and *Ex parte* Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (mixture of two known herbicides held prima facie obvious). As such, it would be obvious to combine deodorants together with the expectation that the combination would also have deodorant properties.

Examiner has duly considered Applicant’s arguments but deems them unpersuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 231 USPQ 375 (Fed. Cir. 1986). Further, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 208 USPQ 871 (CCPA 1981).

Marcus et al. is not required to recited all the components of Applicant’s claimed invention. Further, the use of clinoptilolite as a odor suppressant does not teach away from the

Art Unit: 1616

claimed invention. The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. *In re Linter*, 173 USPQ 560 (CCPA 1972); *In re Dillon*, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991).

As indicated above, the EP patent does not have to teach all components of the claimed invention. Applicant's indicates that citric acid is unstable if used in Applicant's product, however, Applicant's claims do not exclude citric acid. In any case, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). The EP patent actually teaches that the amount of acid will vary depending upon the type of product that it is incorporated into and the particular odors that it is designed to control (pg. 4, lines 40, 41). As such, amounts of acid higher than 10% are suggested by the EP Patent. The disclosure relating to stoichiometric balance does not preclude this conclusion as, contrary to Applicant's argument, the reference does not disclose the use of the acid in combination with a base to form a buffer. In fact the reference specifically indicates that the deodorant is a non-buffer (Pg. 4, lines 24, 25). With respect to Applicant's specification not disclosing any formulation utilizing less than 24%, limitations from the specification are not read into the claims. See *In re Van Geuns*, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 1616

With respect to zinc oxide, as indicated above, the motivation or reason to use zinc oxide need not be the same as Applicant's reason. Examiner notes that Applicant has provided no evidence that it takes zinc oxide at least about 20 minutes and Applicant's declaration does not provide any evidence that zinc oxide would take at least 20 minutes. Further, Applicant's declaration only proves Applicant's reason for adding zinc oxide. It does not overcome the motivation in the prior art to add zinc oxide. Further, the foreign patent abstract or document is not required to disclose all components of Applicant's claimed invention. Finally, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." In re McLaughlin 170 USPQ 209, 212 (CCPA 1971). Also, there is no requirement that an "express, written motivation to combine must appear in prior art references before a finding of obviousness." See Ruiz v. A.B. Chance Co., 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). For example, motivation to combine prior art references may exist in the nature of the problem to be solved (Ruiz at 1276, 69 USPQ2d at 1690) or the knowledge of one of ordinary skill in the art (National Steel Car v. Canadian Pacific Railway Ltd., 69 USPQ2d 1641, 1656 (Fed. Cir. 2004)). As such, contrary to Applicant's arguments, the motivation to combine the references has been set forth above based on or suggested by the teachings of the prior art.



Art Unit: 1616

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

***Conclusion***


A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a flexible schedule. However, Examiner may generally be reached Monday-Friday, 8:00 am – 5:30 pm (EST), except the first Friday of the each biweek which is Examiner's normally scheduled day off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Gary Kunz, can be reached at 571-272-0887. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FIC March 18, 2006



SABIHA QAZI, PH.D  
PRIMARY EXAMINER